

1957

Color Photography, an Instrumentality of Proof

Edwin Conrad

Follow this and additional works at: <https://scholarlycommons.law.northwestern.edu/jclc>

 Part of the [Criminal Law Commons](#), [Criminology Commons](#), and the [Criminology and Criminal Justice Commons](#)

Recommended Citation

Edwin Conrad, Color Photography, an Instrumentality of Proof, 48 J. Crim. L. Criminology & Police Sci. 321 (1957-1958)

This Criminology is brought to you for free and open access by Northwestern University School of Law Scholarly Commons. It has been accepted for inclusion in Journal of Criminal Law and Criminology by an authorized editor of Northwestern University School of Law Scholarly Commons.

POLICE SCIENCE

COLOR PHOTOGRAPHY, AN INSTRUMENTALITY OF PROOF

EDWIN CONRAD

The author is a practicing attorney in Madison, Wisconsin. He is a graduate of the University of Wisconsin and the University of Wisconsin Law School, and in addition holds a degree of Master of Arts from this same institution. Mr. Conrad is the author of two books, *Modern Trial Evidence* (1956) and *Wisconsin Evidence* (1949). He has served as a lecturer on the law of evidence and scientific evidence at the University of Wisconsin, and is a member of the American Law Institute and the American Academy of Forensic Sciences.—EDITOR

HISTORICAL HIGHLIGHTS

Color photography, the miracle of modern science, is popularly assumed to be of recent origin. Yet we know that the first attempts at reproducing color chemically were made by Prof. T. J. Seebeck of Jena who in 1810, long before photography had even been discovered, observed that if moistened silver chloride were allowed to darken on paper and then exposed to different colors of light, the silver chloride would approximate the colors that had effected it. In 1861 James Clerk Maxwell, who predicted the existence of radio waves, demonstrated by experiments that all colors could be reproduced by suitable mixtures of the three groups of colors, red, green, and blue. Maxwell made three filter solutions, one red-orange, one green, and one blue-violet. On three separate pieces of photographic film he made three separate pictures of a group of colored ribbons, one picture through each of the filters. After the films were developed to black and white negatives, Maxwell made positive projection transparencies. He placed one in each of three projection lanterns. In front of each lantern he placed a glass tank containing one of the filter solutions so that the red-filtered positive was projected through the red dye solution, the green-filtered positive through green, and the blue-violet through blue-violet. The three images from the three lanterns were superimposed upon the projection screen in accurate register. The result was a picture in color of the original colored ribbons. Maxwell's demonstration marks the beginning of successful photographic color work.

The intervening years witnessed the discovery of many color photographic processes, practically all of which have been discarded, but it was not until approximately 1935 that color films as we know them today were successfully introduced and developed. While color photography as such still presents many problems, and while manufacturers of color film are well aware of certain deficiencies in their products, no one will dispute the fact that the color film we use today is a masterpiece of perfection and design. A study of color materials and processes will reveal that color photography has gained sufficient standing and scientific recognition to be utilized by the courts.¹

¹ "Just when a scientific principle or discovery crosses the line between the experimental and demonstrable stage is difficult to define. Somewhere in this twilight zone the evidential force of the

THE COLOR PROCESS

Color as such may have significant probative value. By way of illustration, it may be claimed by the state's witnesses that a car involved in a holdup was blue. The accused alleges that he owns no blue car. A faithful color reproduction of the accused's car may either prove or disprove the state's case. When color in itself has intrinsic probative value, and a color transparency or print of the object or scene in question is offered in evidence, no intelligent ruling on the admissibility of such evidence can be made without an understanding of the fundamentals of color photography. This does not mean that lawyers have to become experts in the subject. A rudimentary knowledge of fundamentals is sufficient.

All light has color. The fundamental primary colors of light are red, blue, and green. White light is a mixture of all of these primary colors. Blackness indicates an absence of any colored light. By combining the three primary colors, as in nature, white light is obtained. When we combine the primary colors in other proportions, either additively or subtractively, any color can be reproduced.

Under present methods, color may be reproduced by either *additive* or *subtractive* processes. In the former, as seen in Maxwell's original demonstration, starting with one primary color, another is added, forming a combination of the two. *Subtractive* processes commence with white light or a mixture of light, and by removing part of the light of some of the wavelengths, leave the remaining colors, which are only a part of the white light.

Color films in general used today are based on the subtractive process, and are composed of superimposed layers of cyan (blue-green), magenta (purple), and yellow, which exert independent control of the primary colors. The top layer is sensitive to blue, the second layer, to green, and the third layer, to red. There is a yellow filter between the first and second layers of emulsions. As the light from an object falls on this three color (tripack) sensitized film, blue is recorded on the top layer, green on the middle layer, and red on the bottom layer. By a process of color development, including the use of a dye coupler and image reversal, a "positive" transparency is obtained. This is viewed by transmitted light or projected on a screen and will reveal the original colors photographed. In another type of film, a negative color image is developed without reversal, from which color prints may be obtained.

Color prints, which are viewed by reflected light, may be made from either color transparencies or color negatives. Some prints are made on tri-emulsion papers, not films, by processes similar to those above described. A more elaborate method of producing prints is the dye transfer process which, in the case of transparencies, requires three color-separation negatives to be made from the original through red, green, and blue filters. Each negative is then printed on a matrix film and then processed to produce a positive relief image in gelatin. These three relief images are

principle must be recognized, and while courts will go a long way in admitting expert testimony deduced from a well-recognized scientific principle or discovery, the thing from which the deduction is made must be sufficiently established to have gained general acceptance in the particular field in which it belongs." *Frye v. United States*, 54 App. D. C. 46, 293 F. 1013, *1014, 34 A. L. R. 145 (1923). He who wants to use scientific evidence will be constantly faced with this principle of judicial proof.

soaked in cyan, magenta, and yellow dye baths respectively. When the dye images are transferred in register to a sheet of dye transfer paper, a color print is produced. Color negatives are printed in a similar manner, except that the matrices are printed directly from the negative.

It may be observed that positive transparencies, when viewed through transmitted light or when projected on a screen, portray more faithful color rendition than color prints observed with the aid of reflected light.

REALISM OF COLOR PHOTOGRAPHS

We have become so accustomed to black and white photographs that we accept them as the real thing. Actually, black and white photography is considered a two dimension, abstract medium. It has perspective and contrast, but it can only record color in shades of gray and therefore does not represent reality as such.

Nature, on the other hand, is vivid with color. We see colored objects around us constantly. We would be living in a drab world of illusions and dreams if through the use of filtered glasses we eliminated all of nature's color. Color photography is, therefore, more realistic than black and white photography. It adds a third dimension—that of color.

Color is not only beautiful; it is practical as well. It enables us to distinguish objects more readily. If a plane on a photographic reconnaissance mission has color film in its camera, it can bring back a record disclosing terrain containing the tell-tale sign of metallic ores, which would not be distinguishable in a black and white picture.

Once we forget its novelty and glamorous aspects, we shall accept color photography as the closest proximation to reality and nature's own glow.

The inherent realism of color photography has been urged as a reason for rejecting black and white photographs of the same subject. For example, in a case in which photographs in black and white of the deceased's body, showing wounds, mutilations and bruises, were offered in evidence, it was pointed out by objecting counsel that they should not be admitted in evidence because they failed to show the various *colorings* of the bruises. The court rejected the argument on the theory that the various colors would show up as various hues of gray.² A similar objection to black and white photographs of a colored car, the identity of which was in issue, was disposed of in a like manner.³ It is conceivable that, when color photographs become the accepted standard of photography, the courts will reconsider the point and sustain such objections to black and white photographs lacking the realism of color pictures.

COLOR VARIABLES

At the outset, we should bear in mind that:

"If we make critical measurements of the very best color photographs, we find considerable differences between their colors and those of the original subjects. Actually, there is no available process of color photography which can be said to give entirely

² *Hancock v. State*, 209 Miss. 523, 47 So. 2d. 833 (1950). But see *Farrel v. Weitz*, 160 Mass. 288 35 N. E. 783 (1894).

³ *State v. Davis*, 72 Idaho 115, 238 P. 2d 450 (1951).

accurate and repeatable reproduction of color. . . . color films, properly used, give satisfactory color rendering for their intended purposes, but in the present state of technical knowledge it is not possible to design materials suitable for making precise color records, or for matching or measuring color. Further, since the reproduction of a physical subject by means of a color transparency or print involves psychological factors in the response of the observer, it can never be 'perfect' in any simple sense."⁴

This general limitation on the use of color photography as an instrumentality of proof has not perturbed the courts to any degree. However, where color itself is one of the ultimate facts in issue and a color photograph or transparency is offered in evidence, the judge or trial lawyer should be cognizant of various color variables which may enter into the picture. These variables may be enumerated as follows:

(1) *Illumination*. Color films are balanced for certain lighting conditions. Use of improper or the wrong type of illumination will result in improper color rendition since color film is sensitive to changes in the color content of the source of illumination. The use of color film requires that the temperature of the light be matched with the color balance of the film itself. The illumination can be *balanced* to the film by proper color compensating filters, and likewise the color on the print can be *manipulated* by the use of the same filters.

(2) *Exposure*. Exposure of color film is critical. Either underexposure or overexposure will produce incorrect color rendition.

(3) *Contrast*. Color films, as compared to black and white films, have very little contrast latitude. Therefore, objects and scenes not falling within the latitude of the film will also have incorrect color rendition.

(4) *Processing*. Processing in color photography is a critical operation and manufacturers' recommendations and standard procedures must be followed. Color distortion is the inevitable result of deviating from these standard procedures.

(5) *Reflections*. Color on the subject from surrounding areas will be affected by reflected light.

(6) *Psychological and Visual Factors*. Color film does not always see colors as human beings see them. While the human eye may and does adapt itself to differences in light conditions, the color film does not. Moreover, human beings frequently will compare a colored print with a mental rather than physical image of the subject and quite often are unable to identify the real colors of the object in issue. Color is, therefore, essentially a psychological factor. Color blindness in human beings⁵ must also be taken into account.

(7) *Impurities in, and Deterioration of Dyes*. Dyes, the essential part of the color process, are not permanent and are susceptible to light, moisture, and heat. The breakdown of these dyes in any manner will create false color values. Impurities in the dyes will cause similar deviations.

These variables must be taken into account when a color film is offered in evidence to prove an original color value.

⁴ COLOR AS SEEN AND PHOTOGRAPHED, Eastman Kodak Co., Rochester, N. Y., p. 52. (First Edition, Second Printing, 1951).

⁵ "It is safe to say that approximately 8 percent of men and 0.4 percent of women are more or less color-blind." Ibid. at p. 55.

DEFINITIONS

Color photography, as distinguished from the art and technique of black and white photography—in other words simple or elementary photography—which connotes and involves light, has resulted from improved and progressive techniques and has been defined as the production of colored images by physical or chemical techniques other than hand coloring; any mechanical process which records the form and the color of an object by means of photography. "Technicolor" is a means of doing this, a photographic process, and a machine printing color dye images is photographic apparatus.⁶

Colored photographs, on the other hand, in the mind of the public, refer to a hand oil painted picture.⁷

With these definitions in mind, let us examine the attitude of the courts with respect to the admissibility of color films. But before we do so, it might be helpful to observe the reaction of the courts to color itself and their thinking with respect to the admissibility of hand colored photographs.

COLORED PHOTOGRAPHS

We find many authorities on the general subject of marking photographs, but very few cases deal with hand colored photographs.

In a murder prosecution the state introduced in evidence a diagram illustrating the scene of the crime, properly authenticated. An objection was made that it was partly colored in *red* ink. The language of the Georgia court, written in 1882, long before the advent of color films, is particularly significant, in view of the repeated outcry that color films are gruesome:

"Neither do we see any objection to this diagram 'because part of it was drawn in red ink as suggestive of the bloody deed, and as calculated to inflame the minds of the jury'. The scene and circumstances attending this terrible tragedy in the simple recital of eye witnesses is presented in colors of a deeper stain than the mere sketches of red lines or other figures upon the diagram exhibited."⁸

An expert in a homicide prosecution sought to link a palm print found at the scene of the crime with defendant's palm print. A photograph of defendant's palm print was enlarged and portions of the enlargement were circled by the expert in *red* ink for comparison between the print at the scene and defendant's palm print. It was held by the Louisiana court that the marking of the photograph was necessary to enable the expert witness to testify in such manner that the jury could clearly grasp his evidence.⁹

The plaintiff in a personal injury suit suffered severe facial disfigurement. To show

⁶ *Technicolor Motion Pictures Corporation v. Westover*, 202 F. 2d 224, *227 (C. A. 9th 1953).

⁷ *Gold Tone Studios v. Federal Trade Commission*, 183 F. 2d 257, *258 (C. A. 2nd, 1950). This case holds that "tinted" and "colored" are not synonymous; "tinted" refers to photographs which have been only partly touched with pigment, while colored photograph applies to one fully covered with color.

⁸ *Moon v. State*, 68 Ga. 687, *695 (1882).

⁹ *State v. Dunn*, 161 La. 532, 109 So. 56 (1926), writ of error dismissed 273 U.S. 656, 47 S. Ct. 344, 71 L. Ed. 825 (1927).

the extent of this disfigurement, plaintiff offered in evidence a photograph showing a full view of her face and taken before the accident. The cross-examiner developed the fact that the photograph had been *linted* and touched up by the artist. The objection was made that the photograph did not represent a true likeness disclosed by scientifically accurate processes. Despite this objection, the Alabama court held that the photograph was admissible; and that the artificial coloring, added before the accident, which fact was made known to the jury, furnished no sufficient ground for exclusion of the picture.¹⁰

However, where there was an issue as to whether defendant's truck and hopper were properly lighted, it was held that a hand drawing of the truck, trailer, and hopper, depicting two lanterns painted in *red*, was not admissible because it was not based on the evidence and because its main purpose was to impress upon the jury the presence of the *red* lanterns.¹¹

This survey of cases decided prior to the advent of the color films indicates that color as such does not frighten the courts.

The use of colored photographs to illustrate testimony is quite helpful. For example, in administrative proceedings before the Federal Communications Commission, expert engineers will color various service contours appearing on a photographic map in transparent oil colors. This emphasizes the important parts of the exhibit. A conglomeration of black lines without colors is difficult to read and often confusing.

It will be interesting to note what the courts will do with color photographs produced by the "flexichrome" process, which does not use color film but black and white negatives and which is equivalent to a process of applying colors by hand with a brush, although photographic techniques are used to a certain extent.

THE GREEN¹² CASE, AN HISTORIC MILESTONE

The first reported case involving the admissibility of color photographs was *Green v. City and County of Denver*,¹² decided September 27, 1943. This decision was the natural vehicle for the introduction of color photographs in the judicial process. The accused was charged with violating an ordinance prohibiting the keeping for sale of putrid meats in his operation of a grocery and butcher shop. The suspected contaminated meat consisted of wieners and liver. Just prior to trial these articles were placed alongside of similar fresh meat and photographed on color film. The municipality offered these colored photographs in evidence. It appeared that one of the color photographs was made from a film which had been underexposed and hence the color of the liver shown was darker than it really was. However, in the case of the other color photographs, it was testified that they were accurate pictures of the objects portrayed, even as to color. An objection was made to the underexposed film and the color print made therefrom. Because the photographer frankly explained to the jury that the color of the one print was not accurate due to underexposure, the Colorado Supreme Court could find no prejudicial error in the reception of such

¹⁰ *Harris v. Snider*, 223 Ala. 94, 134 So. 807 (1931). Also see *People v. Madison*, 3 Cal. 2d. 668, 46 Pac. 159 (1935).

¹¹ *Moore v. Jansen & Schaefer*, 265 Ill. App. 459 (1932).

¹² 111 Colo. 390, 142 P. 2d. 277 (1943).

exhibit. An objection by defendant that the fresh wieners used in the film were not the same type as the slimy and moldy wieners involved was disposed of by the court with the comment that the color prints were not in the appellate papers and therefore such fact could not be ascertained from the record.

The *Green* case represents an ideal situation calling for the use of color film. What can be more persuasive than a color comparison between fresh and contaminated meat on color film, provided there is a true rendition of color values? If the underexposed film were the only one available to prove the condition of the liver, then since color was one of the issues in the case, the objection should ordinarily have been sustained. The presence of other accurate color reproductions in the case clearly made the admission of such underexposed film non-prejudicial. One wonders, however, why the color films were not sent up to the Supreme Court of Colorado as part of the record on appeal.

A few years later, in 1947, in a case involving personal injuries to the plaintiff as he was operating a shaper machine, the employer introduced in evidence a "technicolor" motion picture film of the scene of the accident to show the manner of operation of the machine. The color film was allowed as evidence on the theory of an experiment, but the *color* aspects of the moving picture were not discussed by the court.¹³

These cases illustrate the early use of color films in the courts. As naturally expected, however, their use in homicide cases became quite pronounced and led to the outcry, "gruesome and inflammatory!"

USE IN HOMICIDE CASES

A review of the cases indicates that color photography has been used to a great extent in homicide cases to depict the scene of the crime, including the location of the body and also to portray the body or parts thereof to show the nature of the wounds and the cause of death. One of the leading proponents of the use of color photography in homicide cases is Dr. Richard Ford, Department of Legal Medicine, Harvard medical school, one of the nation's outstanding pathologists. Dr. Ford's technique is demonstrated by him at the Prosecutors' Course at Northwestern University. Dr. Ford uses color photographs to show the nature of the wounds of the victim as illustrating the cause of death. The Oklahoma Criminal Court of Appeals has recognized Dr. Ford's work in this respect. In *Pruitt v. State*,¹⁴ the court cites the following statement by Dr. Ford illustrating his technique in homicide cases:

"To support my disagreement with some of your reasons I enclose photographs of a series of cases. The 35 mm. lantern slide in color of a young man with a bullet wound in the center of his forehead is pertinent. He shot himself from a distance of an inch or so sitting in a chair in front of a mirror with the rifle propped up on books. The bullet passed between the two cerebral hemispheres in the saggital fissure downward and backwards through the cerebellum and came to rest on a ridge of bone between the right and left posterior fossae. This he apparently achieved by backsighting against his own image. You will notice that he has bled from the nose, from the right ear and into both orbits.

¹³ *Richardson v. Missouri-K-T. R. Co.*, 205 S. W. 2d. 819 (Tex. Civ. App. 1947).

¹⁴ 270 P. 2d. 351 (Okla. Cr. App. 1954).

This is the result of many radiating fracture lines from the wound of entrance down through the base of the skull in several directions."¹⁵

The writer personally witnessed such demonstration by Dr. Ford at the prosecutors' course above mentioned and will attest to the effectiveness of this type of evidence in color. Powder burns and blood are particularly noticeable. Most of the significant details of a wound would be lost in black and white photographs or slides.

In *State v. Long*,¹⁶ the accused was prosecuted for the murder of the owner of a truck used in a subsequent bank robbery. There were admitted in evidence color transparencies of the head of the deceased taken during an autopsy by an eminent pathologist. It was held that the color transparencies were admissible for the purpose of explaining and demonstrating the testimony of the pathologist; that such color photographs were admissible to show the nature of the wound and the probable cause of death; that the pictures were relevant for the purpose of showing the extent of the bleeding at the entrance and exit wounds respectively; that the bleeding was chiefly from the wound in front of the right ear, tending to indicate that the deceased was shot from behind, the bullet entering behind the left ear; that the absence of any evidence of powder in the wounds tended to indicate that the shot could not have been fired by the deceased; and that the color photographs tended to negative accident, suicide, or self-defense. The court indicates that color photographs of the body of the victim at the scene of the crime are admissible to show the position of the body when found by the officers. Finally, the court held that the state should not be deprived of relevant evidence merely because it is gruesome. "If a jury is incapable of performing its function without being improperly influenced by evidence having probative force, then the jury system is a failure. It is not a failure. Long experience convinces us of the ability and willingness of citizens called for jury duty to perform that duty with fidelity."¹⁷

The trial court in *State v. McMullan*,¹⁸ permitted the coroner to identify three color slides of the body of a policeman (alleged to have been killed by the accused) at the scene of the crime. An objection was made to the slides on the ground that they were unnecessary, gruesome, and inflammatory. The objection was overruled, and the coroner was permitted to project the slides on a screen. In holding that there was no error the Louisiana court stated:

"One answer to counsel's contention is that the photographs do not portray a scene so gruesome or revolting as to incite the emotions of the jury against appellant. The three pictures show the deceased, fully clothed, lying on the bloodstained floor alongside the bed in the room where he was shot. True enough, all pictures of death by violence are inelegant and unpleasant, but this does not mean they should be withheld from the jury's view even though they are merely cumulative evidence."¹⁹

In a prosecution for murder color transparencies of the scene of the crime showing the victim were admitted in evidence without objection. The state then requested

¹⁵ *Ibid.*, Pac. Cit. p. 358.

¹⁶ 195 Oreg. 81, 244 P. 2d. 1033 (1952). In accord: *Armijo v. People*, 304 P. 2d. 633 (Colo. 1956) color slides of deceased showing knife wounds inflicted by defendant.

¹⁷ *Ibid.*, Pac. Cit. p. 1052.

¹⁸ 223 La. 629, 66 So. 2d. 574 (1953).

¹⁹ *Ibid.*, So. Cit. p. 575. In accord: *People v. Moore*, 310 P. 2d. 969 (Cal. 1957).

that the witness verifying the slides be permitted to erect in the courtroom his own projector and screen and project the color slides on the screen. The trial court allowed this to be done over the objection that the *projection* of the slides would be gruesome. The Oregon court held that there was no error in permitting such projection.²⁰ Likewise in the celebrated case of *State v. Sheppard*,²¹ during the trial pictures in color of the head of the victim, showing the wounds after the blood had been washed off, were admitted in evidence. These colored slides were then shown to the jury by projection on a six by six foot screen, the colored projected image being four by four feet. It was claimed by the defense that the projection exaggerated the size of the wounds and unfairly emphasized the cause of death. In disposing of this argument the appellate court held:

"Except for the size of the pictures, there is no claim that they were distorted or inaccurate. They dealt with a subject vital to one of the issues of fact, that is, the cause of death and the severity of the blows. . . The defendant was not prejudiced by the manner of showing these pictures."²²

On the basis of present decisions the courts hold that the general rules applicable to photographs in general will apply to color films. In *State v. Huff*,²³ colored slides of the victim, after removal from her grave, had been permitted in evidence to show discoloration of the left temple which she injured as she was pushed down the stairs, over the objection that they were gruesome and prejudicial simply because they were in *color*. Overruling the objection the New Jersey court held the photographs admissible despite their gruesome nature and observed:

"We are not cognizant of any authority distinguishing color photographs from the standard black and white type, and we are unable to discern any logical reason why they should not be used as evidence, subject to the same limitations and restrictions as already adjudicated as to the ones customarily used."²⁴

In holding color slides admissible in a murder case, the Massachusetts court commented:

"The fourth assignment of error relates to the introduction in evidence as exhibits of several colored slides which were projected upon a screen during the testimony of the pathologist. The defendant excepted to their use and to their introduction as exhibits because they were inflammatory and prejudicial. In passing we pause to note that all the evidence was such as to indicate that the crime was committed with such extreme atrocity and violence that these slides could add little to inflame or prejudice the jury. . . It may be well to note that no case has been brought to our attention and we have found none, at least in this jurisdiction, where a distinction has been made between the use of ordinary photographs and colored ones. We are of the opinion, however, that what

²⁰ *State v. Kuhnhausen*, 201 Oreg. 478, 272 P. 2d. 225 (1954).

²¹ 100 Ohio App. 345, 128 N. E. 2d. 471 (1956), affirmed 165 Ohio St. 293, 135 N. E. 340 (1956), cert. denied 352 U. S. 910, 77 S. Ct. 118, 1 L. Ed. 2d. 119 (1956). In accord: *Armijo v. People*, 304 P. 2d 633 (Colo. 1956), color slides of deceased projected.

²² *Ibid.*, 128 N. E. Cit. at p. 497.

²³ 14 N. J. 240, 102 A. 2d. 8 (1954). Followed: *State v. Wise*, 19 N. J. 59, 98, 115A 2d 62, 82 (1955).

²⁴ *Ibid.*, Atl. Cit. p. 13.

was said in the *Noxon* case as to the use of enlargements and photomicrographs applies to enlargements of photographs in color.²⁵

The *Noxon* case referred to requires sufficient verification showing that such types of photographs are fair, accurate, and trustworthy, and a showing that they would aid the jury in understanding the issues.²⁶

A color stereoslide depicting the scene of a murder, including the victim, was shown before a jury in a darkened courtroom in *Fields v. State*.²⁷ Failure to object to such slide was held to constitute a waiver of any objection to the evidence, although counsel later changed his mind and made an objection based upon its inflammatory and gruesome nature.

USE IN OTHER CRIMINAL CASES

The state, in *State v. Michel*,²⁸ offered in evidence color photographs of the victim of a rape the morning after the crime showing numerous bruises to the body. They were held to be admissible to support the state's case and their projection in the darkroom of the coroner's office was held not prejudicial error.

In *State v. Aldrich*,²⁹ a felonious assault case, *enlarged color photographs* of defendant's hands, taken the morning after the assault, were held admissible to connect defendant to the crime, although the case may be explained on the theory that defendant failed to object.

PERSONAL INJURY CASES

The extensive use of color photographs in personal injury suits, particularly to show the nature of the injuries, was an expected development. However, the Minnesota Supreme Court holds the honor of having decided the first reported case on the subject. In *Knox v. City of Granite Falls*,³⁰ plaintiff, a seven year old girl, was severely burned on the buttocks, back, thigh, and abdomen. In holding color photographs of the plaintiff admissible, the Minnesota court reasoned:

"Colored photographs of Donna taken three months after the accident were admitted in evidence over objection. Defendant claims that because these photographs were merely cumulative and manifestly calculated to excite sympathy they should not be received. It is well settled that in personal injury actions photographs are admissible to show the existence and nature of injuries providing they are relevant and accurately portray the injuries at the time they were taken. The photographs here were clearly relevant in showing Donna's condition as bearing upon the extent of her pain and suffering, and the fact that they were taken three months after the accident does not, of itself, render them inadmissible. Nor are they necessarily inadmissible because they are of a gruesome nature. Here the attending physician testified that the photographs were a

²⁵ *Commonwealth v. Makarewicz*, 132 N. E. 2d. 294 (Mass. 1956, at p. 299 N.E. Cit.)

²⁶ *Commonwealth v. Noxon*, 319 Mass. 495, 66 N. E. 2d. 814 (1946).

²⁷ 284 P. 2d. 442 (Okla. Cr. Apps., 1955).

²⁸ 225 La.1040, 74 So.2d. 207 (1954) aff'd 350 U.S. 91, 76 S. Ct. 158, 100 L. Ed. 83, reh. den. 350 U.S. 955, 76 S. Ct. 340, 100 L. Ed. 831. In accord: *State v. Iverson*, 289 P. 2d. 603 (Idaho, 1957).

²⁹ 174 Kan. 335, 255 P. 2d. 1027 (1953). See also, *Cordero v. State*, 297 S. W. 2d, 174 (Tex. 1956).

³⁰ 72 N. W. 2d. 67 (Minn. 1955). In accord: *Anderson v. Evans*, 83 N. W. 2d. 59 (Neb. 1957).

true representation of Donna's condition on the date taken, and there is no evidence tending to show otherwise. Moreover, the record discloses that at the pretrial conference the defendants stipulated that the questioned photographs show the condition of Donna Knox at the time the photos were taken. The admissibility of the photographs rested largely in the discretion of the trial court, and we can find no abuse of that discretion. However, it should be noted that caution must be exercised in admitting colored photographs which tend to exaggerate the seriousness and extent of wounds or burns. Where such photographs give false impressions of disability or of pain and suffering endured, the prejudicial effect might well outweigh the probative value. There is no indication that such a false impression was created in the instant case."³¹

An increasing use of this type of proof in personal injury cases is to be expected.

SUMMARY

Twelve appellate decisions have considered the admissibility of color films and photographs and without exception color photography has been recognized as an instrumentality of proof. Color as color has significant probative value and color films and photographs, when relevant, are recognized as competent proof of color to depict scenes, persons, and objects. A color photograph is not considered gruesome or inflammatory merely because of its color content. Therefore, while the admissibility of photographs rests largely within the discretion of the trial court, the courts will not exclude color films and photographs on the ground they are gruesome and inflammatory where the photographs are useful to prove some issue in the case. In other words, the courts have not become frightened by the color aspects of such color films and prints.

Leading authorities have taken the position that the introduction of color films and prints is subject to the same rules, limitations, and restrictions that govern the admissibility of black and white photographs. This requires the usual authentication, either by the photographer or by some other person having knowledge of the facts, that the color film or print is a fair and accurate representation of the scene, person, or object it is intended to portray. This would imply that it is a fair representation of the color in question. It would be well in the authentication process to include a statement that it is a fair representation as to color.³² As a matter of trial practice, the courts will permit the projection on a screen of positive color transparencies, using a projector for that purpose. That the projection will enlarge the image to a considerable degree and thus accentuate the details constitutes no legal objection to such projection.

Obviously, if color itself is in issue, false color rendition should affect admissibility of the color films. Nevertheless, if it is proved that the colors are approximately correct and fairly representative of the colors of the objects portrayed, slight or inconse-

³¹ *Ibid.*, N. W. Cit., p. 73.

³² It is suggested by some processors of color film that they will furnish an affidavit as to date when the film was received for processing, date when processed, when returned, the processing number, and the assertion that no portions were removed or retouched in any manner. See *PHOTOGRAPHY IN LAW ENFORCEMENT*, Eastman Kodak Co., Rochester, N. Y., p. 90 (1948). As a practical matter this may work, but obviously the affidavit is hearsay. The statement may qualify as a regular entry if the custodian of the records is produced.

quential deviations from the true color values should affect the weight but not the admissibility of such color films.

As in black and white photography, there may be times when the prejudicial effect of color photographs may outweigh their general probative value, as in situations in which they give false impressions. Under general principles of evidence, the courts are vested with a wide discretion in the matter, caution being the loadstone guiding them.

The realism of color photography renders it a mighty potent means of proof. For this reason, it seems that the courts will continue to deal favorably with the introduction in evidence of color films and prints.³³

³³ For authorities on the subject of color photography generally, see: CONRAD, *MODERN TRIAL EVIDENCE*, §724, p. 613 (1956); SCOTT, *PHOTOGRAPHIC EVIDENCE*, §4, 14, 20, 153, 192, 178, 216, 654, 627, 893, including 1955 Supplement (1942); MCCORMICK, *EVIDENCE*, §181, p. 389 (1954); MCKELVEY, *EVIDENCE*, §394, p. 691 (5th Ed. 1944). See also Note, *Admissibility in evidence of colored photographs*, 50 A.L.R. 2d. 1102 (1957); CAPECELATRO, *Color Photography—a New Technique*, 24 N. Y. STATE BAR BULLETIN, 372 (1952).

In a note: *Adapting Color Photography to Police Work*, 46 JOUR. CRIM. L., CRIM. & POL. SCI. 285 (1956), it is observed that the application of color photography to routine accident scenes by the Denver Police Department indicates that this medium is capable of general application in the hands of moderately experienced photographers. The Denver Police Department has established a *Modus Operandi* file in color, and it is their experience that many identifications which would have been missed in black were possible when colored photography was used.